

What is claimed is:

1. A sewing machine with needle holder of needle interval adjustable type comprising loopers mounted on a looper stand movable laterally beneath a needle plate, a main needle holder
5 disposed above the needle plate and having a screw portion for fitting needle bar, a sub needle holder fitted to the main needle holder by a set screw so as to be adjustable in position, and plural needles individually fitted to the needle holders and penetrating through needle holes of the needle plate when
10 descending, whereby capable of narrowing or widening the interval of the plural needles by changing the fitting position of the sub needle holder to the main needle holder when loosening the set screw,

characterized in that the fitting position of the sub needle
15 holder to the main needle holder is changed by a longitudinal slit formed linearly in the main needle holder, and cloth penetration lines by at least two needles of the plural needles are mutually arranged in a narrow width.

2. The sewing machine with needle holder of needle interval
20 adjustable type as defined in claim 1, wherein the plural needles fitted to the needle holders are disposed at a sliding surface side of the longitudinal slit.

3. The sewing machine with needle holder of needle interval adjustable type as defined in claim 1, wherein the longitudinal
25 slit of the main needle holder is extended linearly forward from

the main needle holder, and a concave sliding surface is formed at its left side.

4. The sewing machine with needle holder of needle interval adjustable type as defined in claim 1, wherein the sub needle
5 holder is disposed in the longitudinal slit of the main needle holder, said sub needle holder is slidably fitted to a concave sliding surface of the longitudinal slit.

5. The sewing machine with needle holder of needle interval adjustable type as defined in claim 1, wherein the sub needle
10 holder is fixed by the set screw through a slot formed in the longitudinal slit.

6. The sewing machine with needle holder of needle interval adjustable type as defined in claim 1, wherein a right needle fitting hole is opened at the lower end of the main needle holder,
15 the upper part of the right needle is fixed in the right needle fitting hole, a left needle fitting hole is opened at the lower end of the sub needle holder, the upper part of the left needle is fixed in the left needle fitting hole.

7. The sewing machine with needle holder of needle interval adjustable type as defined in claim 6, wherein the right needle fitting hole and the left needle fitting hole deviate
20 longitudinally.

8. The sewing machine with needle holder of needle interval adjustable type as defined in claim 1, wherein the loopers are
25 provided in a plurality corresponding to the plural needles,

and the looper responsible for the needle of the sub needle holder is mounted on the looper stand through the looper holder so as to be adjustable in longitudinal position.

5 9. The sewing machine with needle holder of needle interval adjustable type as defined in claim 1, wherein plural loopers are disposed beneath the needle plate, one looper is responsible for the right needle, and its base is mounted on the looper stand, other looper is disposed ahead of the looper and responsible for the left needle, and its base is mounted on a looper holder, 10 the looper holder has a sliding portion, and the sliding portion is fixed to a concave sliding surface formed in the looper stand by a screw, and the looper holder is slidable longitudinally along the concave sliding surface of the looper stand when the screw is loosened.

15 10. The sewing machine with needle holder of needle interval adjustable type as defined in claim 1 or 8, wherein the needle plate has a guide piece at its lower side, and the guide piece partly blocks the needle hole of the needle plate from the cloth feed direction.

20 11. The sewing machine with needle holder of needle interval adjustable type as defined in claim 10, wherein the guide piece is fixed by a screw through a slot of the needle plate, and the needle penetration hole for the left needle out of the needle holes in the needle plate is partly blocked by 25 the guide piece from the cloth feed direction.

12. The sewing machine with needle holder of needle interval adjustable type as defined in claim 11, wherein a needle penetration hole for the left needle out of needle holes of a presser foot disposed above the needle plate for pressing the cloth to the needle plate is a slot, and even after change of position of the sub needle holder to the main needle holder, the left needle penetrates through the slot.

13. The sewing machine with needle holder of needle interval adjustable type as defined in claim 11, wherein the top of the needle plate around the slot is recessed, and the screw is prevented from projecting above the needle plate.